

Tracks containing descriptive or instructional introductory comments are indicated in italics.

Track number (time)		Track title
Descriptive	Demonstration	
1 (0.37)		Calibration using a sound level meter
2 (0.36)		Calibration tone at 1 kHz, 70 dB, 15 sec
3 (0.19)		Calibration using conversational speech
4 (1.22)		About this audio demonstration compact disc
5 (0.22)	6 (0.48)	Pitch: Low-pitched (musical) sounds
7 (0.12)	8 (1.06)	Pitch: High-pitched (musical) sounds
9 (0.43)	10 (0.16)	Frequency: Pure tone (middle C)
11 (0.51)	12 (0.43)	Complex tones: triangle, square, sawtooth waveforms (middle C)
13 (0.27)	14 (1.51)	Frequency analysis of a complex tone (piano, middle C)
15 (1.01)	16 (1.52)	Broadband (music) sound in octave bands
17 (0.40)	18 (1.25)	Industrial blower* sound in octave bands
19 (0.28)	20 (1.20)	Water knife* sound in octave bands
21 (0.16)	22 (1.03)	Supercomputer* sound in octave bands
23 (0.22)	24 (0.55)	Broadband vs. tonal sounds: jet aircraft takeoff and landing
25 (0.18)	26 (1.52)	Industrial sounds* containing broadband and tonal components
27 (0.46)	28 (0.38)	Loudness: 1 kHz tone in 10 dB steps from 45 to 85 dB
29 (0.21)	30 (0.39)	Loudness: Pink noise in 10 dB steps from 45 to 85 dB(A)
31 (0.41)	32 (2.51)	Hearing sensitivity vs. frequency and level
33 (0.50)	34 (2.09)	A-weighting: Jet aircraft takeoff and landing
35 (0.16)	36 (1.25)	A-weighting: Industrial sounds*

Track number (time)		Track title
Descriptive	Demonstration	
37 (0.37)	38 (1.59)	Levels of typical sounds: 50 dB(A) - 85 dB(A)
39 (0.33)	40 (1.20)	Audiometric tones: 500 Hz - 8000 Hz at 60 dB
41 (0.45)	42 (1.23)	Progressive conductive hearing loss: filtered speech
43 (0.31)	44 (2.23)	Progressive sensori-neural hearing loss: filtered speech
45 (0.24)	46 (4.58)	Progressive sensori-neural hearing loss: filtered music
47 (0.17)	48 (3.09)	Hearing protector fitting: broadband noise at 85 dB(A)
49 (0.14)	50-65 (11.47)	Sounds of NASA Glenn Research Center* Emission spectrometer; letter-cutting machine; steam plant; process air plant startup sequence; Engine Components Research Laboratory; Mach .3 Burner Rig room; Mach .3 Burner Rig air startup; Mach .3 Burner Rig flame test; rocket test; wind tunnel startup sequence; turret punch; brake press; riveting; air chisel; grinder

Total playing time 62.45 minutes. Suggested classroom lesson 47.18 minutes (tracks 1- 46 only)

*Recorded by Michael Bishop and Scott Burgess, Telarc International Corporation

Voice talent: Ann Candler Harlan and David M. Harlan

* Tracks 45 and 46 have been removed from this reprinted version of *Auditory Demonstrations in Acoustics and Hearing Conservation*. Several updated demonstrations of music listening with simulated hearing loss may be found on *Auditory Demonstrations II: Challenges to Speech Communication and Music Listening*. To request a free copy, visit the Acoustical Testing Laboratory website at <http://acousticaltest.grc.nasa.gov>.